Intervention: Needle exchange

Finding: Sufficient evidence for effectiveness

Potential partners to undertake the intervention:

- ☒ Nonprofits or local coalitions
- ☐ Businesses or labor organizations
- ☐ Schools or universities
- ☐ Media
- ☐ Health care providers
- ☒ Local public health departments
- ☐ State public health departments
- ☐ Policymakers
- ☐ Hospitals, clinics or managed care organizations
- ☒ Other: AIDS service organizations

Background on the intervention:

Needle exchange programs (NEPs) are one type of outreach. NEPs supply syringes and other supplies to individuals who inject substances in exchange for used syringes, which enables users to avoid sharing equipment. This contact creates opportunities for one-on-one health education and/or risk reduction counseling and referral to other services, such as drug treatment and HIV counseling and testing. Sites for needle exchange should be based upon input of active users. NEPs provide the following benefits:

- Basic health education provided through conversations and written materials.
- Increased rapport with individuals in the target population for the purpose of establishing trust and providing harm reduction services that incrementally help participants reduce drug use and sexual risks of HIV and hepatitis in a client-centered manner.
- Distribution of materials and supplies to reduce the incidence of HIV and hepatitis transmission and acquisition.
- Direct provision of, or linkages to, HIV counseling, testing and referral services, hepatitis C testing, and hepatitis A and B vaccination and testing.
- Appropriate referrals to community providers.

NEPs have three primary components:

- *Communication of basic HIV/hepatitis C (HCV) prevention messages*, information on other STIs, or other topics requested by clients
- *Distribution of risk reduction materials/supplies* including materials to: reduce injection drug and sexual risk associated with HIV, hepatitis, and other STIs; prevent drug use-related medical conditions such as abscesses and infection; and prevent overdose.
- *Linkages to a variety of services*, including referral to non-HIV related services such as alcohol and drug treatment, domestic violence programs, and programs to meet daily living needs; and more intensive HIV-related services such as sexual risk assessment, risk reduction and behavioral interventions, HIV counseling, testing, and referral, hepatitis testing and vaccination, and, when appropriate, HIV medical evaluation and care.

Needle exchange is legal, and several programs operate in Wisconsin. At present, the use of federal funds to support needle exchange programs is banned.

Findings from the systematic reviews:

Numerous studies have demonstrated that needle exchange programs result in a decrease in needle-sharing with no increase in drug use or needle use resulting from the availability of needles (School of Public Health, University of California, Berkeley and the Institute for Health Policy Studies, University of California, San Francisco; Vlahov D).

As with other cost-effectiveness calculations, that for NEPs uses factors such as number of HIV infections prevented and the cost of the intervention itself. The average annual budget for a NEP is $169,000, with a range of $31,000 to $393,000, or $.71 to $1.63 per syringe distributed. Mathematical models indicate that over time, HIV infections will be prevented at a cost of $9,400 per infection averted, compared to the $119,000 lifetime cost of treating an HIV-infected person. (School of Public Health, University of California, Berkeley and the Institute for Health Policy Studies, University of California, San Francisco).

Additional information:

A Center for AIDS Prevention Studies (CAPS) fact sheet entitled Does HIV Needle Exchange Work? is available online at: www.caps.ucsf.edu/NEPrev.html

The Wisconsin Department of Health and Family Services (DHFS) has developed core requirements for providing these interventions. Organizations undertaking these interventions should follow the recommendations outlined below.

Agencies providing needle exchange agree to:

1. Maintain regular contact and collaboration between direct service, program support, and program supervisors.

2. Develop staff qualifications and requirements to include:

    - Cultural competency regarding the target populations and subgroups within the target populations, including knowledge of the following: individual and group values, special needs, social systems, communication styles, impact of historical relationships with social service providers, etc.
    - Basic training and experience in health education, HIV/hepatitis prevention, harm reduction philosophy, and behavior change theories;
    - Sensitivity to community norms, values, cultural beliefs, and traditions;
    - Knowledge of Wisconsin statutes regarding drug use and drug paraphernalia;
    - Trust of the population to be served;
    - Role model for the population;
    - Advocate for the population; and
    - Informed about community resources and comfortable with their use.

3. Establish exposure control plans based on the provisions of the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard 29 CFR 1910:1030, issued December 6, 1991 and the current OSHA Compliance Directive CPl 2-2:69, issued November 27, 2001. For example, the plan, at minimum, should articulate procedures for the following: safe handling and labeling of hazardous materials;

addressing accidental needle sticks and subsequent medical procedures; transporting, storing, and disposing of hazardous materials; providing hepatitis B vaccination to all staff involved in syringe exchange services--including staff whose duties may include storing and arranging disposal of hazardous materials, maintaining vaccination records in separate employee medical files and for a minimum of three years after employment has ended; and maintaining a sharps injury log. For more information on the OSHA Bloodborne Pathogens Standard and minimum exposure control plan requirements, see: www.osha.gov/SLTC/bloodbornepathogens/index.html.

4. Provide annual training to all employees who have potential occupational exposure to bloodborne pathogens in compliance with OSHA standards. The training should include, at minimum, the epidemiology, symptoms, and transmission of bloodborne disease including HIV, hepatitis B (HBV) and hepatitis C (HCV), an explanation of the exposure control plan, the use and limitations of engineering controls, and an explanation of universal precautions. The training shall be conducted by professional health care staff knowledgeable about the OSHA Bloodborne Pathogens Standard. Training records shall be established for each employee upon completion of training and must be kept for three years after employment has ended. Training records shall also include dates of training, contents or a summary of the training sessions, names and qualifications of persons conducting training, and names and job titles of all persons attending training sessions. (See the OSHA Web site above for complete information on training component requirements.)

5. Provide adequate workmen's compensation insurance that covers potential exposure to infectious materials.
6. Establish and maintain accounting practices that clearly define and differentiate use of state GPR funds vs. federal funds for needle exchange activities, including: purchase of supplies; storage, labeling and disposal of syringes and other program-related hazardous waste; and percent of work hours of all program supervisory, direct service, and support staff.
7. Design activities for building the trust and respect of the community:

    - Establish and maintain a positive relationship with community stakeholders, including city leaders, local law enforcement, local district attorney offices, local health departments, and neighborhood associations and centers.
    - Identify and develop collaborative relationships with community providers, including local public health departments, public defenders' offices, neighborhood centers, medical clinics, HIV prevention and care services, and providers to meet daily living needs.

8. Prepare a written field protocol that is regularly updated and addresses, at minimum, the following: measures to protect safety of direct service staff; measures to protect confidentiality and privacy of program participants; and staff procedures in the event of police intervention during NEP activities.

9. Provide services to participants free of charge.

10. Establish and adhere to a regular and consistent schedule of activities, including times and location.
11. Assess the needle sharing and sexual risk behaviors of individuals and provide risk reduction planning, when possible, without compromising trust with the client.
12. Establish a 1:1 ratio for exchanging syringes, when possible, without compromising trust with the client.
13. Provide updated messages on needle sharing and sexual risk reduction strategies for the population being served and offer risk reduction materials appropriate to individual participants.
14. Provide participants with information on State of Wisconsin paraphernalia statutes.
15. Establish methods to obtain participant feedback on program processes and design.
16. Routinely recommend and provide direct or referral access to HIV and hepatitis C testing.
17. Routinely recommend and provide linkages to hepatitis A and B vaccination and testing services.
18. Establish linkages to a variety of AODA (Alcohol and Other Drug Abuse) services and programs, including traditional 12-step programs, programs based in “harm reduction” philosophy, and methadone maintenance programs.
19. Establish mechanisms to maintain participant confidentiality in record keeping.
20. Track data regarding client demographics, supplies and materials distributed, used syringes obtained, and additional services and referrals provided.
21. Establish collaborative relationships and provide training and technical assistance with any new agencies approved by the Wisconsin AIDS/HIV Program to provide needle exchange in the service region.

Although financial support of syringe exchange activities is restricted to state GPR funds, agencies shall convene a Program Review Panel, consistent with requirements set forth by the Centers for Disease Control and Prevention (CDC), to review and approve all program educational materials (brochures, fliers, posters, videotapes, audio cassettes, questionnaires or surveys, curricula or outlines for educational sessions, public service announcements, Web pages, etc.). Provide to the Wisconsin Department of Health and Family Services statements signed by the Chairperson of the Program Review Panel specifying the vote for approval and disapproval for each item that is reviewed.

References:

CDC’s Diffusion of Effective Behavioral Interventions (DEBI) - www.effectiveinterventions.org

Seal DW, Winningham AL. Scientifically sound HIV prevention interventions: Summary of critical reviews. Report prepared for Wisconsin HIV Prevention Community Planning Council, Wisconsin AIDS/HIV Program (September 9, 2003).

The public health impact of needle exchange programs in the United States and abroad: summary, conclusions, and recommendations. Prepared by the School of Public Health, University of California, Berkeley and the Institute for Health Policy Studies, University of California, San Francisco. Prepared for the Centers for Disease Control and Prevention, 1993.

Vlahov, D. The role of needle exchange programs in HIV prevention. NIH Consensus Development Conference on Interventions to Prevent HIV Risk Behaviors: On-line Edition 1997.

Wisconsin HIV Prevention Community Planning Council, 2005-2008 Wisconsin Comprehensive HIV Prevention Plan (2005).

Wisconsin AIDS/HIV Program. Wisconsin AIDS/HIV Program HIV prevention intervention plan and data collection and reporting forms (October 2001).